

AMENDMENTS TO CLAIMS

- 2
1. (cancelled)
 2. (cancelled)
 3. (cancelled)
 4. (cancelled)
 5. (cancelled)
 6. (withdrawn)
 7. (cancelled)
 8. (cancelled)
 9. (cancelled)
 10. (cancelled)
 11. (cancelled)
 12. (cancelled)
 13. (cancelled)
 14. (cancelled)
 15. (cancelled)
 16. (cancelled)
 17. (cancelled)
 18. (cancelled)
 19. (cancelled)
 20. (cancelled)
 21. (cancelled)
 22. (currently amended) An isolated ~~CSP-polyptide~~ or a fragment thereof having *S. mutans* ~~CSP competence signal peptide~~-activity.
 23. (currently amended) The polypeptide of claim 22 comprising a *S. mutans*-~~CSP competence signal peptide~~.
 24. (previously amended) The polypeptide of claim 23 comprising all or part of an amino acid sequence in [SEQ ID NO:2] or [SEQ ID NO:4].
 25. A ~~polyptide fragment variant or a peptide mimetic of the polyptide of claim 24, or a peptide mimetic of the CSP~~.
 26. (currently amended) The polypeptide of claim 24 or 25 which is recombinantly produced.

27. (currently amended) A polypeptide comprising a sequence having greater than 30%, 50% or 60% sequence identity to the polypeptide of claim 24 or 25.
28. (currently amended) The polypeptide of claim 24 or 25, isolated from *S. mutans*.
29. (withdrawn)
30. (withdrawn)
31. (withdrawn)
32. (cancelled)
33. (cancelled)
34. (cancelled)
35. (cancelled)
36. (cancelled)
37. (cancelled)
38. (new) A polypeptide wherein 1 - 15 amino acids of the polypeptide of claim 24 have been removed from the N- and/or COOH terminal of SEQ ID NO:2 or SEQ ID NO:4.
39. (new) A polypeptide wherein 2 - 5 amino acids of the polypeptide of claim 24 have been removed from the N- and/or COOH terminal of SEQ ID NO:2 or SEQ ID NO:4.
40. (new) A polypeptide wherein 6 - 10 amino acids of the polypeptide of claim 24 have been removed from the N- and/or COOH terminal of SEQ ID NO:2 or SEQ ID NO:4.
41. (new) A polypeptide wherein 10 - 15 amino acids of the polypeptide of claim 24 have been removed from the N- and/or COOH terminal of SEQ ID NO:2 or SEQ ID NO:4.
42. (new) A synthetic polypeptide having competence signal peptide activity and comprising the 21-amino acid sequence of SEQ ID NO:16.

43. (new) A polypeptide wherein 1 - 15 amino acids of the polypeptide of claim 24 have been modified to include up to 1 point mutation per each 10 amino acids of SEQ ID NO:2 or SEQ ID NO:4, or a portion thereof.

44. (new) The polypeptide of claim 43 wherein each said mutation comprise substitution with another amino acid.

22